

**EXHIBIT 81**  
**REDACTED**

## Global Bernanke

gTrade

July 26, 2015

Global Bernanke is an extension of project Bernanke in which GDN retains a [REDACTED] margin on AdX as a whole, while deviating from [REDACTED] on individual publishers. This deviation is [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED].

Future versions of Global Bernanke will see deviations from [REDACTED] not just on individual publishers but also on specific important slices ([REDACTED]).

For now, algorithmically, we solve the following optimization problem:

Maximize incremental conversions

subject to

network margin [REDACTED]

individual publisher margin [REDACTED]

publisher payout / bernanke payout [REDACTED]

The network margin of [REDACTED] is a business constraint. With purely this constraint, the total revenue impact would have been [REDACTED], but we have the other constraints for the following reasons:

We set individual publisher margin to be at least [REDACTED] to ensure that GDN don't lose money on any publisher. [REDACTED]

[REDACTED]

The publisher payout / current publisher payout [REDACTED] is a heuristic that limits any publisher from losing more than [REDACTED] of what they make now with this launch. This constraint is dynamic meaning the bernanke payout is computed [REDACTED]. In the experiment, we do see that [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

## Results

We are running a [REDACTED] experiment starting 7/21, and below are the links to relevant metrics so far.

[REDACTED]  
[REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]

Publisher payout from GDN [REDACTED]

**Publisher impact analysis**

Payout Impact Breakdown:



